

Spot Safety Project Evaluation

Project Log # 200512211

Spot Safety Project # 11-01-200

Spot Safety Project Evaluation of the Installation of Advance Overhead “Yield to Pedestrians” Signs on NC 184/NC 194 (Main St) at Lees-McRae College Avery County

Documents Prepared By:

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Traffic Safety Systems Management Section
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Principal Investigator

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11/14/2006
Date

Spot Safety Project Evaluation Documentation

Subject Location

Evaluation of Spot Safety Project Number 11-01-200 – NC 184/194 (Main St) at Lees-McRae College, from approximately 0.11 miles to 0.23 miles east of the north approach of NC 184.

Project Information and Background from the Project File Folder

The spot safety project improvement countermeasure chosen for the subject location was the installation of advance overhead “Yield to Pedestrians” signs. Four pedestrian crosswalks were installed on NC 184/194 (Main St) prior to the project. The signs were meant to supplement fluorescent yellow-green Advance Crossing warning signs and Crossing warning signs that were installed with the crosswalks.

NC 184/194 (Main St) is a two-lane facility at the subject location and bisects the campus of Lee-McRae College. There are two parking lots on the north side of the highway, with the campus located on the south side. The speed limit is 25 mph.

The initial statement of problem was that there was the potential for vehicle/pedestrian collisions. The “Yield to Pedestrians” signs were installed to help prevent these potential collisions.

The final completion date for the improvement at the subject intersection was on July 17, 2001 with a total cost of \$6,000.00.

Naïve Before and After Analysis

After reviewing the spot safety project file folder along with all the crashes at the subject location, the crash data omitted from this analysis to consider for an adequate construction period was from June 1, 2001 through August 31, 2001. The before period consisted of reported crashes from January 1, 1997 through May 31, 2001 (4 years, 5 months) and the after period consisted of reported crashes from September 1, 2001 through January 31, 2006 (4 years, 5 months). The ending date for this analysis was determined by the available crash data at the time the crash analysis was completed.

The treatment data consisted of all crashes from 150 feet west of the first crosswalk to 150 feet east of the final crosswalk, a distance of approximately 700 feet. *Please see attached location map for further details.*

The following data table depicts the Naïve Before and After Analysis for the treatment location. Please note the crashes involving pedestrians were the target crashes for the applied countermeasure.

<u>Treatment Information</u>			
	Before	After	Percent Reduction (-) Percent Increase (+)
Total crashes	0	1	N/A
Target Crashes	0	0	N/A
Volume	9,100	10,000	9.9

There were no crashes in the before period and only a single crash in the after period. There were no target crashes. The before period ADT year was 1999 and the after period ADT year was 2003.

Results and Discussion

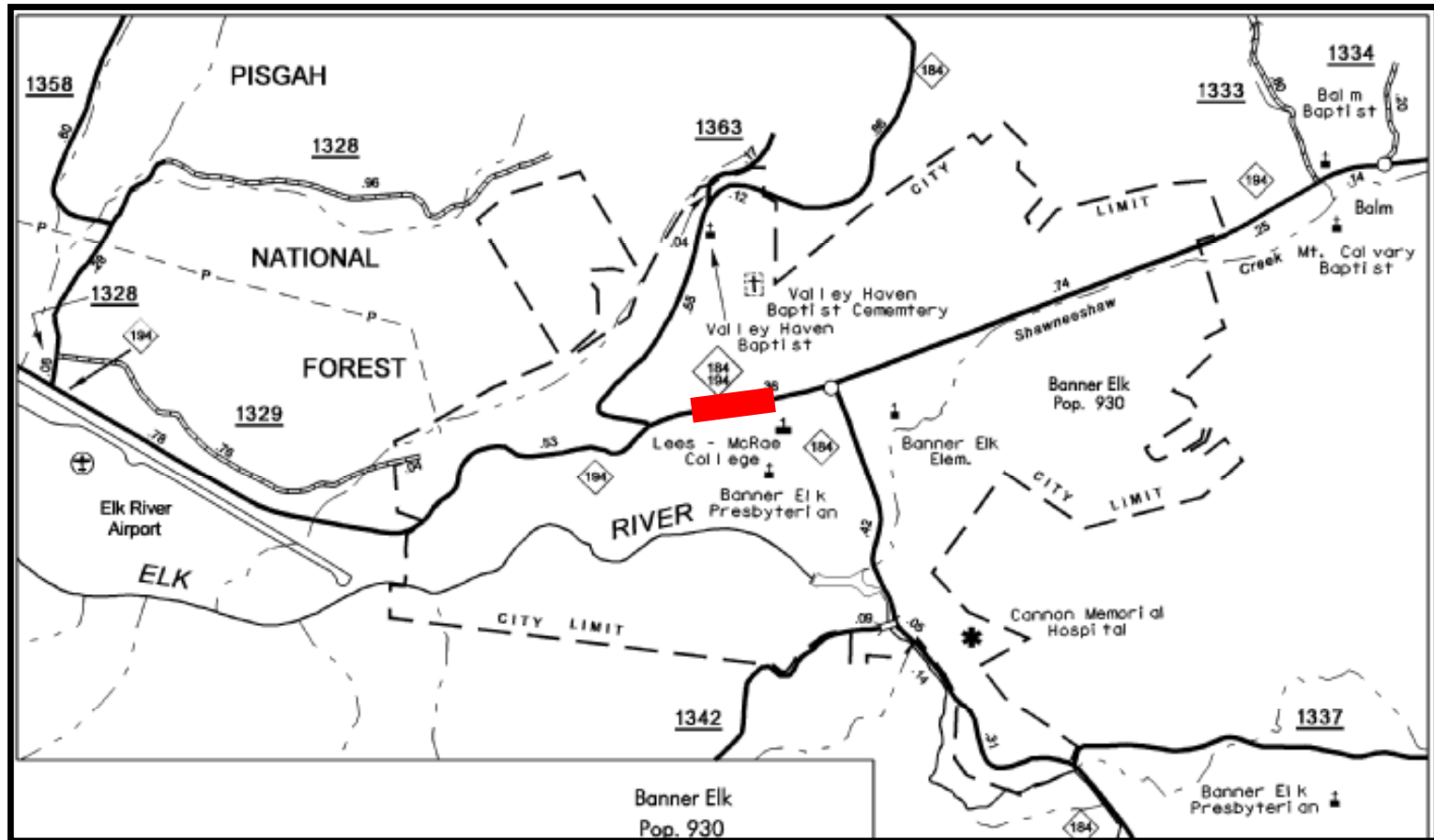
There were no crashes at the subject location in the before period and only one crash in the after period. The single crash in the after period involved a vehicle sliding on ice into a light pole. It did not involve a pedestrian.

With minimal crash history at this location, a crash-based evaluation of the countermeasure does little to determine its effectiveness.

Please see the attached *Treatment Site Photos*.

As the Safety Evaluation Group completes additional spot safety reviews for this type of countermeasure, we will be able to provide objective and definite information regarding actual crash reduction factors for this type of countermeasure.

Location Map
Avery County
Evaluation of Spot Safety Project 11-01-200



Treatment Site Location: NC 184/NC 194 (Main St) from approximately .11 miles to .23 miles
East of the northern approach of NC 184

Treatment Site Photos Taken September 20, 2006



Taken on NC 184/194 Facing East

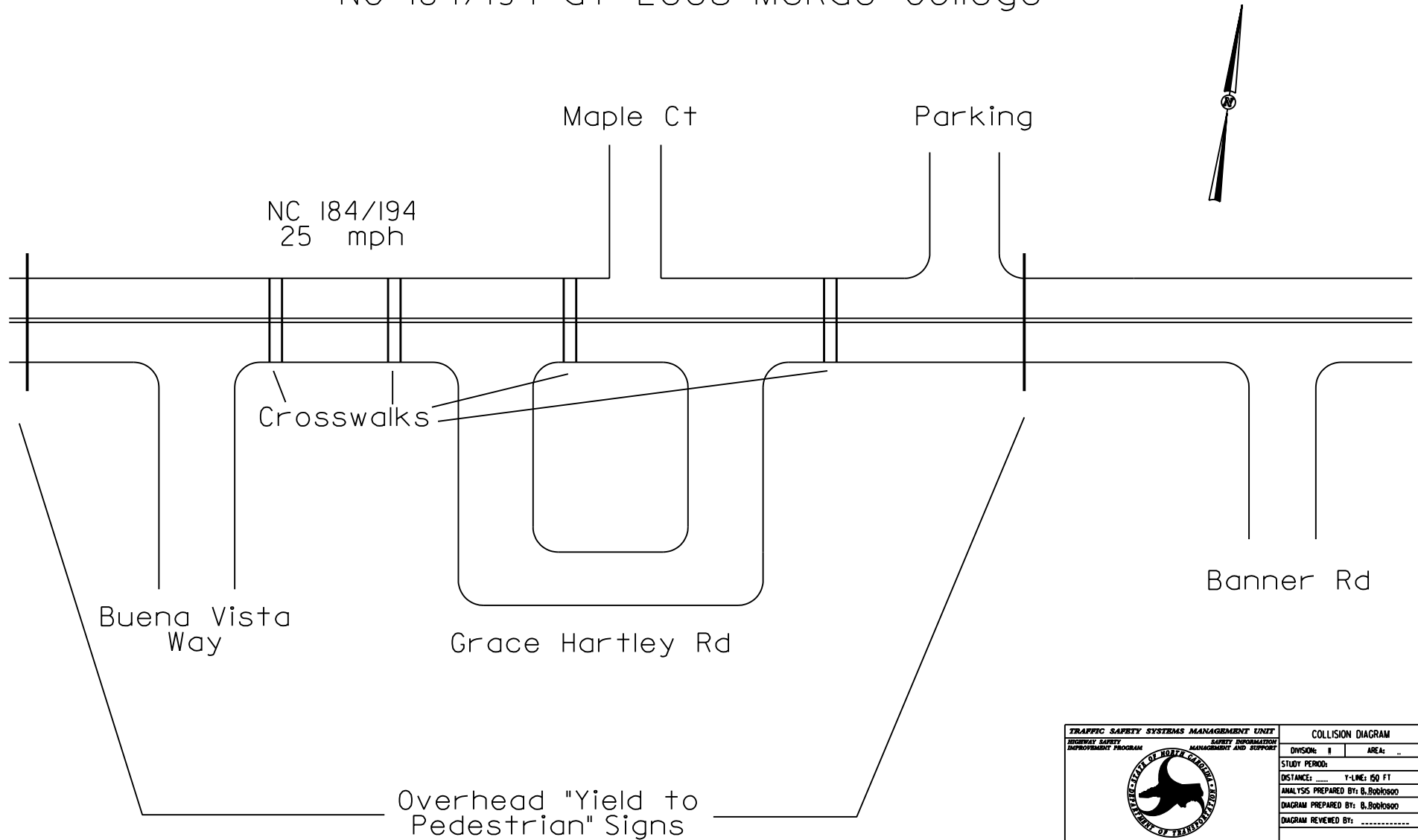



Facing East on NC 184/NC 194



Facing East on NC 184/NC 194

CONDITION DIAGRAM AVERY COUNTY NC 184/194 at Lees-McRae College



TRAFFIC SAFETY SYSTEMS MANAGEMENT UNIT <small>HIGHWAY SAFETY IMPROVEMENT PROGRAM</small>		COLLISION DIAGRAM	
		DIVISION: 8	AREA: ..
		STUDY PERIOD:	
		DISTANCE: Y-LINE: 60 FT	
		ANALYSIS PREPARED BY: B. Bobbitt	
		DIAGRAM PREPARED BY: B. Bobbitt	
SAFETY EVALUATION		TRAFFIC SAFETY	
DATE: 20060801		SCALE: NOT TO SCALE	
LOG NUMBER: 2005028		DATE: Sep 18/Dec. 2006	
N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS TRAFFIC ENGINEERING AND SAFETY SYSTEMS BRANCH			